

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* NATARAJAN S. RAMESH and LEWIS D. SMITH

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Appeal 2006-3021  
Application 09/782,337  
Technology Center 1700

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Decided: September 29, 2006

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Before WARREN, WALTZ, and TIMM, *Administrative Patent Judges*.  
WALTZ, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal from the Primary Examiner's non-final rejection of claims 1 through 7, 9, 10, 13 through 16, 18, 19, 22, 23, and 29 through 31 (Office Action dated May 6, 2005). Claim 24 is the only other claim pending in this Application and stands withdrawn from further consideration by the Examiner as directed to a non-elected invention (Br.

2).<sup>1</sup> We have jurisdiction pursuant to 35 U.S.C. § 134 since the claims on appeal have been twice rejected. *See Ex parte Lemoine*, 46 USPQ2d 1420, 1423 (Bd. Pat. App. & Int. 1998).

According to Appellants, the invention is directed to a composite flooring material consisting essentially of a polyolefin foam sheet, a first polyolefin film heat-laminated to a first surface of the foam sheet, and a second polyolefin film heat-laminated to a second surface of the foam sheet, with at least one edge of the second film extending beyond a corresponding edge of the foam sheet (Br. 2). Claim 1 is illustrative of the invention and is reproduced below:

1. A composite flooring material consisting essentially of:
  - a. a polyolefin foam sheet;
  - b. a first polyolefin film heat-laminated to a first surface of the foam sheet; and
  - c. a second polyolefin film heat-laminated to a second surface of the foam sheet, wherein at least one edge of the second film extends beyond a corresponding edge of the foam sheet.

The Examiner has relied on the following references as evidence of obviousness:

Akao	US 4,469,741	Sep. 04, 1984
Foster	US 5,968,630	Oct. 19, 1999

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<sup>1</sup> We refer to and cite from the “Appellant’s [sic] Amended Brief” dated Jan. 10, 2006.

Claims 1-7, 9, 10, 13-16, 18, 19, 22, 23, and 29-31 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Akao in view of Foster (Answer 3). Based on the totality of the record, including due consideration of Appellants' arguments, we AFFIRM the rejection on appeal essentially for the reasons stated in the Answer, as well as those reasons set forth below.

### OPINION

The Examiner finds that Akao discloses laminated sheets for use as "floor materials" which have good cushioning characteristics (Answer 3). The Examiner further finds that Akao discloses that the sheets comprise two thermoplastic resin film layers bonded via an adhesive layer to a central foam layer, where the resin films, the foam layer, and the adhesive layer may all be formed from polyethylene (*id.*). The Examiner recognizes that Akao does not teach the limitation required by claim 1 on appeal that "at least one edge of the second film extends beyond a corresponding edge of the foam sheet" (*id.*). Therefore the Examiner applies Foster, which is directed to a laminate film/foam flooring composite of low density polyethylene film adhered to a low density polyethylene foam by means of a very thin layer of low density polyethylene, for the teaching of installing the laminate so that the edge of one strip overlies the extended portion of the polyethylene film layer of an adjacent strip to yield a more efficient installation at reduced labor costs (*id.*). From these findings, the Examiner concludes that it would have been obvious to one of ordinary skill in the flooring composite art at the time of the invention to modify the laminated sheets of Akao by extending the edge of the second resin film beyond the corresponding edge of the foam sheet, as taught by Foster, in order to achieve more efficient installation and reduced labor costs (Answer 3-4).

Appellants argue that Akao does not suggest that providing a water vapor barrier is a desired characteristic of the composition, nor does Akao suggest modifying the laminate by providing an extended film edge (Br. 4).

These arguments are not well taken. With regard to the lack of disclosure in Akao of water vapor barrier properties, the motivation in the prior art to combine the references does not have to be identical to that of Appellants to establish obviousness. *See In re Kemps*, 97 F.3d 1427, 1430, 40 USPQ2d 1309, 1311 (Fed. Cir. 1996). With regard to the extended edge, the Examiner admits that Akao does not disclose or suggest this limitation but applies Foster for the suggestion to modify the laminate of Akao (Answer 3-4).

Appellants argue that, when considering Akao, one skilled in the art would have no reason to look to Foster to provide the vapor barrier properties offered by the extended edge (Br. 4). Appellants argue that no evidence is presented by the Examiner that any savings in cost of installation would offset the increased cost of the extended edge strip (*id.*). Appellants further argue that more is required for a proper combination of references than if the art is in the same field of endeavor (*id.*).

Appellants' arguments are not persuasive. As stated above, obviousness may be established even if the motivation to combine references is not the same as Appellants' motivation, i.e., the prior art need not be combined to yield better water vapor barrier properties if there is some other reason, suggestion or motivation for the combination. *See Kemps, supra*. As correctly found by the Examiner (Answer 3-4 and 7-8), Akao and Foster are both directed to flooring materials with good cushioning properties, and Foster would have suggested to one of ordinary

skill in this art the modification of the similar Akao laminate to provide an extending edge for the advantages of more efficient installation and labor cost savings (*see* Foster, col. 2, ll. 40-50; and col. 7, ll. 49-57). The Examiner does not rely solely on the “same field of endeavor” as a reason for the combination of references.

Appellants further argue that, even if one were motivated to combine the teachings of Akao and Foster, one would not arrive at any embodiment of the claimed invention (Br. 5). Appellants argue that the transitional phrase “consisting essentially of” recited in claim 1 on appeal does not permit an additional independent layer to be included in the claim, whereas Akao uses a separate adhesive layer to attach the film to the porous sheet (Br. 5; Reply Br. 4). Appellants also argue that Akao “teaches away” from the claimed invention since this reference teaches that heat-sealing the films is not desirable, and thus Akao teaches that one must use an adhesive and specifically not use heat-lamination (Br. 5; Reply Br. 4).

Appellants’ arguments are not persuasive. As correctly stated by the Examiner (Answer 9), Appellants have not disclosed what “consisting essentially of” specifically excludes or what are the “basic and novel” characteristics of the invention. Appellants’ argument is particularly weak that the adhesive layers taught by Akao would be excluded from claim 1 on appeal when Appellants’ own dependent claims require an adhesive layer (*see* claims 22 and 30) and the Specification teaches that adhesive layers may be included between the resin films and the central foam layer (Specification, p. 3, ll. 22-23; p. 4, ll. 27-28; p. 9, ll. 19-24; and p. 10, ll. 15-17). *See In re Herz*, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (C.C.P.A.

1976); *In re Janakirama-Rao*, 317 F.2d 951, 954, 137 USPQ 893, 896 (C.C.P.A. 1963).

Appellants' argument that Akao "teaches away" from the claimed invention is also not persuasive. As correctly stated by the Examiner (Answer 9-10), the pertinent disclosure of Akao is set forth under "Background of the Invention" and is discussing "heat-sealing," not "heat laminating." The Examiner finds that the "heat-sealing" of Akao is different from the "heat laminating" of Appellants and provides support for this finding (Answer 10). Appellants neither dispute nor rebut this finding in their Reply Brief. Therefore, "heat-sealing" has not been established as equivalent to "heat-lamination" as recited by Appellants. Furthermore, even if heat-sealing is equivalent to heat laminating, Appellants have not established that "heat-sealing" would be unlikely to produce the objective of Appellants' invention, namely bonding of the layers. *See In re Gurley*, 27 F.3d 551, 553, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994). Akao does not teach that heat sealing will not work, but this reference merely indicates that it is less desirable. Therefore we determine that Akao does not "teach away" from the claimed subject matter.

Additionally, we determine that Foster teaches that the "polyethylene film and the polyethylene foam sheet can be laminated together by the use of heat and/or adhesive" (col. 8, ll. 24-26). This teaching from Foster clearly would have suggested to one of ordinary skill in this art that heat lamination would have been useful as a substitute for the adhesive layers in the process and composite of Akao. *See In re Fout*, 675 F.2d 297, 301, 213 USPQ 532, 536 (CCPA 1982) (Express suggestion to substitute one equivalent for another need not be present to render such a substitution obvious).

For the foregoing reasons and those stated in the Answer, we determine that the Examiner has established a prima facie case of obviousness in view of the reference evidence. Based on the totality of the record, including due consideration of Appellants' arguments, we determine that the preponderance of evidence weighs most heavily in favor of obviousness within the meaning of § 103(a). Therefore we AFFIRM the rejection of the claims on appeal under § 103(a) over Akao in view of Foster.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

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